

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE CALIFORNIA OFF-ROAD EMISSIONS REGULATION FOR COMPRESSION-IGNITION ENGINES AND EQUIPMENT

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adopting amendments to the off-road compression-ignition (diesel) regulations and test procedures for engines and equipment. These amendments would harmonize the requirements of California's off-road diesel program with those of the United States Environmental Protection Agency (U.S. EPA) regarding exhaust emission standards, compliance procedures, and testing methods. Manufacturers, remanufacturers, and rebuilders of off-road, compression-ignition engines and equipment would be subject to and have responsibilities under the regulation. This notice summarizes the proposed regulatory amendments. The staff report presents the proposed amendments in greater detail.

DATE: December 9, 2004

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Central Valley Auditorium
1001 I Street
Sacramento, California 95814

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., December 9, 2004, and may continue at 8:30 a.m., December 10, 2004. This item may not be considered until December 10, 2004. Please consult the agenda for the meeting, which will be available at least 10 days before December 9, 2004, to determine the day on which this item will be considered.

If you have a disability-related accommodation need, please go to <http://www.arb.ca.gov/html/ada/ada.htm> for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, please contact the Bilingual Coordinator at (916) 324-5049. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed adoption of amendments to sections 2420, 2421, 2423, 2424, 2425, and 2427, title 13, California Code of Regulations (CCR), and to the following documents incorporated by reference therein: "California Exhaust Emission Standards and Test Procedures for New 2000 and Later Off-Road Compression-Ignition

Engines, Part I-B,” as last amended January 28, 2000; and “California Exhaust Emission Standards and Test Procedures for New 1996 and Later Off-Road Compression-Ignition Engines, Part II,” as last amended January 28, 2000. Proposed adoption of the following document incorporated by reference therein: “California Exhaust Emission Standards and Test Procedures for New 2008 and Later Tier 4 Off-Road Compression-Ignition Engines.”

Background: Health and Safety Code sections 43013 and 43018 direct ARB to achieve the maximum feasible and cost effective emission reductions from all mobile source categories, including off-road diesel engines and equipment, through the setting of emission control requirements. In January 2000, ARB adopted amendments to the off-road emissions regulation for 2000 and later compression-ignition (diesel) engines and equipment. Those amendments established more stringent exhaust standards for particulate matter (PM), oxides of nitrogen (NOx), and non-methane hydrocarbon (NMHC) than were previously required. Further, they harmonized California’s off-road diesel requirements with those of the U.S. EPA at that time.

Despite the significant improvements to air quality resulting from the 2000 and later requirements, commonly referred to as Tier 2 and Tier 3, many regions in California still routinely experience unhealthy air quality. Over 50 percent of the State’s air basins currently violate the federal eight hour ambient air quality standard for ozone (see <http://www.epa.gov/air/oaqps/greenbk/ca8.html>), and many will be in violation beyond attainment due-dates if additional measures are not taken.

Off-road diesel engines are similar to on-road diesel engines in design; however, off-road emission control capability typically lags behind on-road capability because of the added complexity in designing systems that will function reliably for the many different applications of off-road engines. With advanced exhaust aftertreatment standards now required for heavy-duty on-road diesel engines beginning in 2007, staff believes it is appropriate to set similar standards for California’s off-road diesel engines.

Description of the Proposed Regulatory Action: Staff is proposing to amend California’s existing off-road diesel regulations to harmonize with the U.S. EPA requirements for nonroad diesel engines and equipment as set forth on June 29, 2004, in Title 40, Code of Federal Regulations, Part 1039 (40 CFR 1039). This would ensure a greater degree of emission reductions from non-preempted off-road diesel engines in California (i.e., those which the ARB has authority to regulate under the federal Clean Air Act), by enabling the ARB to independently enforce compliance with the regulation, as necessary.

The proposed amendments require new off-road diesel engines to meet more stringent exhaust emission standards for PM, NOx, NMHC, and CO than are currently required. Enhancements to test procedures and the certification process are proposed to ensure meaningful compliance with the new standards and to provide compliance flexibility without sacrificing air quality benefits. A full description of the proposed amendments is

presented in the Staff Report: Initial Statement of Reasons, available as described below.

The proposed standards are based on the use of advanced aftertreatment technologies and will reduce PM and NOx emissions from new engines by up to 95 percent, as compared to previous emission requirements. Furthermore, harmonization serves the interest of the off-road industry in that resources would not have to be invested to comply with separate State and federal requirements.

In addition to the standards, the staff's proposal also mirrors other aspects of the adopted federal rule including requirements for not-to-exceed (NTE) limits, incentives to engine and equipment manufacturers for the early introduction of engines with advanced aftertreatment, new test procedures and test cycles, and extended compliance assistance for engine and equipment manufacturers. As a package, these requirements would help assure that the air quality benefits of the proposed standards are achieved and that engines remain cleaner in-use longer. The harmonization of compliance programs such as averaging, banking, and trading, and equipment manufacturer flexibility should help to ease administrative burdens and allow industry to maintain focus on the technical aspects of emission reductions.

The staff's proposal also supplements the federal rule in a few small but important ways that are intended to provide additional safeguards for a successful implementation of the off-road diesel program in California. For example, more descriptive labeling content on flexibility engines is needed to minimize the potential for abuse by providing ARB investigators a means to verify that the engines used in this program have been correctly placed in service according to the provisions of the regulation. The prohibition on removing the original engine label is meant to ensure the presence of a clear reference to original certification standards, which the engine must continue to meet even after rebuilding or repair.

In addition, coverage by an executive order is necessary for ARB to exercise its enforcement authority regarding flexibility engines. The executive order does not need to be current for the model year in which the flexibility engine is produced, but it must have at least been issued previously. Staff also proposes to continue ARB's in-use compliance/recall program to address noncompliance of the requirements from a California perspective as necessary.

While these are small but important supplements to the federal requirements, we anticipate that none of these changes will encumber compliance or incur additional implementation costs.

COMPARABLE FEDERAL REGULATIONS

On June 29, 2004, U.S. EPA promulgated the Tier 4 regulation (40 CFR 1039) and associated test procedures for new off-road diesel engines. The staff's proposal generally harmonizes ARB's regulation with the federal rule, while preserving specific

features needed by California. Harmonized requirements include the alignment of standards, implementation schedules, compliance procedures, and test procedures.

The staff's proposal differs from the current U.S. EPA regulation in the following ways:

1. Expanded labeling requirement for engines used in the equipment manufacturer flexibility program to include the engine family name beginning in 2006.
2. Prohibition on removing or replacing labels after engine rebuilding beginning in 2006.
3. Clarification on the need for engines used in the equipment manufacturer flexibility program to have been covered by an executive order.
4. Preservation of ARB authority to enforce the regulation independently of the federal government.

The differences that remain between the two programs are justified by the benefit to human health, public welfare, and the environment. In addition, the differences from the federal program are authorized by Health and Safety Code sections 43013 and 43018.

BENEFITS OF THE PROPOSAL

Staff estimates that in 2020, the combined statewide benefits of staff's proposal and the federal rule would be approximately 6.9 tons per day PM, 72.8 tons per day NO_x, and 3.0 tons per day NMHC, based on current off-road emissions inventory modeling. The estimated California cost-effectiveness associated with adoption of staff's proposal would be approximately \$0.58 per pound of combined NMHC and NO_x reduced, and \$7.55 per pound of PM reduced. These estimates are based on the federal calculation of cost-effectiveness. In actuality, however, there are insignificant or no costs to the State associated with staff's proposal because the U.S. EPA's estimates already include California.

AVAILABILITY OF DOCUMENTS AND CONTACT PERSONS

The Board staff has prepared a Staff Report: Initial Statement of Reasons (Staff Report or ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The ISOR is entitled: "Staff Report: Initial Statement of Reasons for the Proposed Rulemaking – Public Hearing to Consider Amendments to the California Off-Road Emissions Regulation for 2006 and Later Compression-Ignition Engines and Equipment."

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikeout format to allow for comparison with the existing regulations, may be accessed on the ARB's web site listed below or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental

Services Center, 1st Floor, Sacramento, California 95814, (916) 322-2990 at least 45 days prior to the scheduled hearing on December 9, 2004.

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the ARB's web site listed below.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Ms. Jackie Lourenc, at (626) 575-6676 or jlourenc@arb.ca.gov, or Mr. Jeff Lowry, at (626) 575-6841 or jlowry@arb.ca.gov.

Further, the agency representative and designated back-up contact persons to whom nonsubstantive inquiries concerning the proposed administrative action may be directed are Artavia Edwards, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-6070, or Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

If you are a person with a disability, and you desire to obtain this document in an alternative format, please contact the Air Resources Board ADA Coordinator at (916) 323-4916, TDD (916) 324-9531, or (800) 700-8326 for TDD calls outside the Sacramento area.

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at <http://www.arb.ca.gov/regact/offrdcie/offrdcie.htm>

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, or other nondiscretionary savings to state or local agencies. The ARB may incur additional implementation or enforcement costs at some future time.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. The ARB is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will not affect small businesses because there will be no incremental cost, or an insignificant cost, associated with staff's proposal in addition to those already needed to comply with the federal regulation.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the regulation that apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

In accordance with Health and Safety Code section 43013(c), the Executive Officer has determined that the standards and other requirements in the regulation are necessary, cost-effective, and technologically feasible for non-preempted new engines and equipment that are used in agricultural operations. In making this determination, the Executive Officer considered the technological effects of emission control standards on the cost, fuel consumption, and performance characteristics of mobile farm equipment subject to the regulation.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the board or that has otherwise been identified and brought to the attention of the board would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

A detailed assessment of the economic impacts of the proposed regulatory action can be found in the Staff Report.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received **no later than 12:00 noon, December 8, 2004**, and addressed to the following:

Postal mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 I Street, 23rd Floor
Sacramento, California 95814

Electronic mail is to be sent to: offrdcie@listserv.arb.ca.gov, and received at the ARB **no later than 12:00 noon, December 8, 2004.**

Facsimile submissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at the ARB **no later than 12:00 noon, December 8, 2004.**

The Board requests but does not require 30 copies of any written submission. Also, the ARB requests that written, facsimile and e-mail statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under the authority granted in Health and Safety Code sections 39600, 39601, 43013, 43018, 43101, 43102, 43104, and 43105. This action is proposed to implement, interpret, and make specific Health and Safety Code sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5, and 43210-43212.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with nonsubstantive or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action. In the event that such modifications are made, the full regulatory text, with the modifications clearly indicated, will be made available to the public for written comment at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, California 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Catherine Witherspoon
Executive Officer

Date:

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs see our Web –site at www.arb.ca.gov.